

### IN THE CLAIMS

Please amend the claims as follows:

1. (previously presented) A method for performing input/output (I/O) floor planning on an integrated circuit design, said method comprising:

collecting design data related to an I/O circuit of said integrated circuit design from a plurality of libraries, customer specifications and design databases;

sorting said collected design data for optimizing simulations of said I/O circuit under operating conditions;

determining whether or not a simulation is required for said I/O circuit before performing I/O floor planning on said I/O circuit;

in response to a determination that a simulation is required on said I/O circuit before performing I/O floor planning on said I/O circuit,

sending said collected design data to a simulation interface;

choosing an I/O behavioral model and a package model by said simulation interface based on said collected design data on said I/O circuit;

dynamically building a simulation deck by said simulation interface using said chosen models along with appropriate operating conditions; and

receiving simulation results by said simulation interface from a circuit simulator after a simulation had been performed by said circuit simulator using said simulation deck containing said chosen I/O behavioral model and said operating conditions; and

performing I/O floor planning for said I/O circuit based on said received simulation results.

2. (original) The method of Claim 1, wherein said method further includes dynamically analyzing simulation results based on user defined criteria.
3. (original) The method of Claim 1, wherein said collecting further includes collecting design specification from a customer's environment condition.
4. (previously presented) The method of Claim 1, wherein said sorting further includes sorting said collected design data according to a frequency of operation of said I/O circuit.
5. (previously presented) A system for performing input/output (I/O) floor planning on an integrated circuit design, said system comprising:

means for collecting design data related to an I/O circuit of said integrated circuit design from a plurality of libraries, customer specifications and design databases;

means for sorting said collected design data for optimizing simulations of said I/O circuit under operating conditions;

means for determining whether or not a simulation is required for said I/O circuit before performing I/O floor planning on said I/O circuit;

in response to a determination that a simulation is required on said I/O circuit before performing I/O floor planning on said I/O circuit,

means for sending said collected design data to a simulation interface;

means for choosing an I/O behavioral model and a package model by said simulation interface based on said collected design data on said I/O circuit;

means for dynamically building a simulation deck by said simulation interface using said chosen models along with appropriate operating conditions; and

means for receiving simulation results by said simulation interface from a circuit simulator after a simulation had been performed by said circuit simulator using said simulation deck containing said chosen I/O behavioral model and said operating conditions; and

means for performing I/O floor planning for said I/O circuit based on said received simulation results.

6. (original) The system of Claim 5, wherein said system further includes means for dynamically analyzing simulation results based on user defined criteria.

7. (original) The system of Claim 5, wherein said means for collecting further includes means for collecting design specification from a customer's environment condition.

8. (previously presented) The system of Claim 5, wherein said means for sorting further includes means for sorting said collected design data according to a frequency of operation of said I/O circuit.

Please cancel Claims 9-12.